MEMORANDUM

TO:

Council, SSC and AP Members

FROM:

Clarence G. Pautzke

Executive Director

DATE:

December 3, 1992

SUBJECT:

Groundfish Regulatory Amendments

ACTION REQUIRED

(c) Receive report on defining legal gear types.

- (d) Comment on enforcement standards for performance-based pelagic trawl definition.
- (e) Receive report on Proposed Rule for hook and line 'fair start' provisions.
- (f) Comment on Proposed Rule for delay of GOA 2nd quarter pollock opening.

BACKGROUND

(c) <u>Legal Gear Types</u>

In September the Council reviewed a draft EA/RIR, prepared by NMFS Region, for a regulatory amendment to define legal gear types. This amendment would specify explicitly which gear types are legal, as opposed to the current situation which only specifies certain illegal gear types. At the September meeting, the Council requested that this amendment be brought back to the December meeting for final action. The amendment is not completed at this time and will be available for Council action at the January meeting.

(d) Performance-Based Pelagic Trawl Definition

At the September meeting the Council recommended that NMFS proceed with development of a proposed rule to implement a performance-based pelagic trawl definition, in addition to the definition based on gear configuration. NMFS is finalizing the rule and has defined the enforcement standards under which it would be implemented. These enforcement standards are summarized under Item D-2(d)(1) in your notebook. Basically, the criteria defining non-pelagic trawling are whether the haul contains 20 or more crabs, predominately intact, and with a carapace width of greater than 1.5 inches.

(e) Hook and Line Fair Start

In September, NMFS advised the Council that they were developing a regulatory amendment to implement fair start provisions for the longline fisheries. This amendment was being developed in response to vessels violating the sablefish opening dates by setting gear early, under the guise of

fishing for miscellaneous finfish. The amendment will create a situation similar to that in the halibut fisheries where vessels are prevented from setting gear 72 hours prior to the opening, if they intend to prosecute a directed fishery during the opening.

At the September meeting, the Council took final action on this issue, stating that they supported the NMFS amendment but, would like the opportunity to comment on the proposed rule. At this time, the proposed rule is not completed but will be available for Council review at the January meeting. NMFS has advised Council staff that the proposed rule being developed will apply only to the sablefish hook and line fisheries. NMFS is available to provide the Council with additional details.

(f) GOA 2nd Quarter Pollock Season Delay

At its September meeting, the Council considered and approved a proposal to delay the 2nd quarter pollock opening in the Gulf of Alaska from its current opening date of March 29 until the Monday nearest June 1. NMFS has prepared an amendment analysis and proposed rule for submission to the Secretary of Commerce. The proposed rule has not been filed in the FEDERAL REGISTER yet, but, the EA/RIR/IRFA is available for review as Item D-2(f)(1) in your notebook. The analysis estimates the season delay to have positive effects on the pollock resource, to reduce the bycatch of chinook salmon, and to have potentially positive effects on Stellar sea lions and other marine mammals. Economic effects of the season delay are also estimated to be positive. If approved by the Secretary, this amendment could be implemented by March 29, 1993, in time to effect the delay for the 1993 fisheries.

PELAGIC TRAWL ENFORCEMENT STANDARDS

A. NON-CONFORMING GEAR:

Use of any trawl net which does not conform to the pelagic trawl definition would be considered non-pelagic trawling regardless of it's catch of crab and would result in enforcement action.

B. OBSERVER REPORTED INCIDENCE OF CRAB:

(1) 20 crabs per haul would be considered bottom trawling and would result in enforcement action.

Except that crabs entangled in the wings of the net forward of the center point of the head or foot rope will not be considered.

Except that crabs contained within any crab pot within the trawl net will not be considered.

Except that crabs with a carapace width of less than 1.5 inches will not be considered. Further, crabs which are not intact will not be considered. A crab shall be considered to be intact if the carapace is attached to the ventral surface and one or more legs are present on both sides of the crab.

Except that any vessel with no more than one haul per week containing more than 20 crab and less than 40 crab shall not be subject to enforcement action.

C. ENFORCEMENT NOTED INCIDENCE OF CRAB

AT-SEA INSPECTIONS:

(1) 20 crabs in a single haul would be considered non-pelagic trawling and result in enforcement action. 40 crabs within any accumulation of catch found on board would be considered non-pelagic trawling and result in enforcement action.

Except that crabs entangled in the wings of the net forward of the center point of the head or foot rope will not be considered.

Except that crabs contained within any crab pot within the trawl net will not be considered.

Except that crabs with a carapace width of less than 1.5 inches will not be considered. Further, crabs which are not intact will not be considered. A crab shall be considered to be intact if the carapace is attached to the ventral surface and one or more legs are present on both sides of the crab.

DOCKSIDE INSPECTIONS.

(1) 20 crabs within any accumulation of catch found on board or off loaded to a plant would be considered non-pelagic trawling and result in enforcement action.

Except that crabs entangled in the wings of the trawl forward of the center point of the head or foot rope will not be considered.

Except that crabs with a carapace width of less than 1.5 inches will not be considered. Further, crabs which are not intact will not be considered. A crab shall be considered to be intact if the carapace is attached to the ventral surface and one or more legs are present on both sides of the crab.

RETENTION OF PROHIBITED SPECIES

Nothing in this enforcement standard would diminish a vessels requirement to sort its catch and return prohibited species to the sea in a timely manner with a minimum of injury. Prohibited species (including crab) which are found to be processed or segregated from the catch would continue to be considered as retained in violation and appropriate enforcement action would be undertaken. Crab which are intermingled in the catch and delivered to a plant would be considered to be retained if the number of crab contained in the catch exceeds 20 crab. In any event crab which are delivered to a plant intermingled with the catch must be returned to the sea and may not be utilized in any manner.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau. Alaska 99802-1668

AGENDA D-2(f)(1) DECEMBER 1992

November 18, 1992

Mr. Clarence G. Pautzke
Executive Director, North Pacific
Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Clarence,

We have prepared proposed rulemaking to delay the start of the second pollock season in the combined Western and Central Regulatory Area of the Gulf of Alaska to the first day of the weekly reporting period closest to June 1. Enclosed is a copy of the draft Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for your information.

This measure was approved by the Council at its September 1992 meeting.

Sincerely,

Steven Pennoyer

Director, Alaska Region

Enclosure



ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW/ INITIAL REGULATORY FLEXIBILITY ANALYSIS

FOR THE

PROPOSED DELAY OF THE SECOND QUARTER POLLOCK SEASON IN THE GULF OF ALASKA

Prepared by the

National Marine Fisheries Service Alaska Region Juneau, Alaska

November 13, 1992

INTRODUCTION

Management Background

The groundfish fisheries in the U.S. Exclusive Economic Zone (EEZ) of the Gulf of Alaska (GOA) in the waters off Alaska are managed under the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP). The FMP was developed by the North Pacific Fishery Management Council (Council) under the Magnuson Fishery Conservation and Management Act (Magnuson Act). Regulations implementing the FMP are found at 50 CFR Parts 611 and 672. General regulations that also pertain to U.S. fishing are found at part 620.

At its September, 1992 meeting, the Council considered a proposal to delay the second quarter pollock fishery in the GOA from the first day of the second quarterly reporting period (around April 1) until the first day of the weekly reporting period closest to June 1. Although the Council did not hold a formal solicitation for management proposals during 1992, the Council felt the subject proposal had sufficient merit to warrant an attempt to implement this measure and provide economic benefits to GOA pollock harvesters and processors during 1993. At the September 1992 Council meeting, industry support for such an action was evident both in public testimony, and in Council approval to send for public review a similar proposal to delay the second pollock season in the BSAI. Many of the same economic and prohibited species catch (PSC) bycatch arguments that apply to the proposed BSAI season delay are relevant to the GOA pollock fishery. order to expedite a GOA season delay, the Council took final action at that meeting to prepare a regulatory amendment for submission and review by the Secretary of Commerce (Secretary). The Council expects to comment on the proposed rule during the comment period, or at its December, 1992 meeting. If approved by the Secretary of Commerce (Secretary) this regulatory amendment to delay the second quarter pollock season in the GOA could be implemented by the current beginning of the second pollock season in 1993, March 29.

Purpose of and Need for the Proposed Action

In the Western and Central Regulatory Areas of the GOA (W/C GOA), pollock is allocated to the inshore component, to three statistical areas and within areas, to four equal quarterly allowances. Seasonal allowances were implemented under Amendment 19 to the FMP to reduce wastage of the pollock resource, protect the marine ecosystem and reproductive potential of pollock, and provide for an equitable distribution of the pollock resource among its users. Area allowances were implemented under Amendment 25 to the FMP and are intended to provide spatial and temporal distribution of the harvest and prevent localized

depletion of pollock needed for forage by Steller sea lions. Under current regulations, the second quarterly allowances become available on the first day of the second quarterly reporting period; for 1993, March 29. The purpose of this proposed action is to delay the beginning of the second quarterly pollock season in the W/C GOA from that date to first day of the weekly reporting period closest to June 1.

Proposers of this action contend a season delay is necessary:

- (a) to improve value of the pollock total allowable catch (TAC) by harvesting pollock at a time when flesh yield is higher,
- (b) to provide a potential reduction in capture and discards of undersized pollock, and
- (c) to provide an anticipated decrease in prohibited species bycatch of chinook salmon.

Alternatives

Two alternatives are considered:

Alternative 1 is the status quo in which the second pollock season in the W/C GOA will begin at the start of the second quarterly fishing period (i.e., March 29 start date for 1993). Due to other management actions, however, 1990 was the most recent year in which an April pollock fishery occurred. In 1991 and 1992, fishing for pollock in the W/C GOA began on June 13 and June 1, respectively, dates similar to the current Alternative 2.

<u>Alternative 2</u> is a delay of second pollock season in the W/C GOA until the first day of the weekly reporting period closest to June 1, i.e., May 31 for 1993. Alternative 2 is the preferred alternative adopted by the Council, and would provide a second pollock season similar to that experienced in 1991 and 1992.

Description of the Groundfish Fisheries

The most recent description of the groundfish fishery as a whole is contained in the Draft Economic Status of the Groundfish Fisheries off Alaska, 1992, an appendix to the Draft SAFE documents for the BSAI and GOA groundfish fisheries for 1993. That draft includes information on the catch and value of the fisheries, the numbers and sizes of fishing vessels and processing plants, and other economic variables that describe or affect the performance of the fisheries.

Organization of the Document

This analysis takes the form of an Environmental

Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA). The season delay would be a regulatory amendment to the regulations implementing the GOA FMP.

ENVIRONMENTAL AND BIOLOGICAL IMPACTS

Present Situation: In the GOA, pollock is allocated 100 percent to inshore processors. In the W/C GOA, pollock is allocated to three statistical areas, and within each area, as four equal seasonal allowances. By regulation, pollock fishing seasons coincide with quarterly reporting periods. For 1992 these reporting periods began on January 1, March 30, June 29, and September 28; for 1993, the periods begin January 1, March 29, June 28, and October 4. Directed fishing continues under open access until either the total allowable catch (TAC), or the quarterly directed fishing allowance specified by the Regional Director, NMFS, Juneau, is taken.

The most recent year in which a W/C GOA pollock fishery occurred in April was 1990. In 1991 and 1992, the second season was delayed until June. In 1991, the second season commenced on June 13. That change was the result of a delay in approval of the pollock harvest specification because of a need to complete additional analyses and a Section 7 consultation for Steller sea lions under the Endangered Species Act (ESA). In 1992, the second season opened on June 1, the result of an emergency rule (ER). That rule was intended to prevent preemption of the inshore component by the offshore component until allocations of pollock under Amendment 23 to the FMP were effective.

The domestic groundfish industry has more than adequate capacity to harvest and process the pollock TAC in the W/C GOA, and the allocation of pollock to seasons and areas has resulted in small seasonal pollock allowances. The resultant pollock fisheries are of short duration; the number of days directed fishing for pollock was open during the second season in 1992 was: area 61, two days; area 62, 16 days; and area 63, 11 days.

Changes to Pollock Fishing Patterns

The following outlines how the second seasonal pollock fishery may operate in the W/C GOA with a delay in the pollock second season to around June 1. These scenarios are based on information provided by the domestic observer program, by processors, and on analyses of domestic fisheries data from the last several years:

(a) the same individuals would likely participate in harvesting and processing of GOA pollock as in 1992, including some processors in close proximity to the BSAI who also participate in BSAI pollock fisheries.

This is similar to the pattern experienced in 1991 and 1992. Any GOA pollock harvesters that also participate in June salmon fisheries may not be able to participate fully in the pollock season, depending on dates of the salmon openings.

- (b) given excess harvesting capacity, harvesters already fishing pollock in the GOA are expected to replace those electing to fish species other than pollock, or in the BSAI. The duration of pollock fisheries is anticipated to be similar to that in 1992; i.e., several days to two weeks within the second quarter.
- (c) apportionment of W/C GOA pollock into fisheries in three statistical areas insures that the harvest will be dispersed spatially. The proportion of catch in each area taken near principal ports of Kodiak, Sand Point, and Akutan/Dutch Harbor will depend on distribution of pollock and participation by harvesters based in each port.
- (d) fishermen report a potential for requiring less travel time and shorter tows than in April when pollock have largely completed spawning and are dispersing.
- (e) when and where the bottom trawl pollock fishery can operate will depend on the status of the seasonal apportionments of the halibut PSC limit specified for trawl gear fisheries. It is anticipated that as in 1991 and 1992, fisheries for other groundfish targets, particularly Pacific cod and flatfishes, would cause the seasonal closure of the GOA to all trawling with the exception of trawling for pollock with pelagic trawl gear prior to the pollock fishery. The delayed pollock fishery could then be conducted only with pelagic trawls.

Sizes of Pollock Caught

Anecdotal information from harvesters, processors, and groundfish observers indicates that at the beginning of the second quarter, the W/C GOA pollock catch typically includes a mixture of large and small fish, which appears to contribute to higher discard rates at the beginning of the second quarter than in June. In a year when a strong year class is recruiting to the fishery, as in 1992, there can be a large number of fish too small for most commercial uses, and the proportion of discards tends to be higher. With additional time to grow these fish would presumably be larger and more suitable for automated processing later in the year. By decreasing pollock discards, this proposed delay would be consistent with the objectives of Amendment 19 that established the quarterly pollock allocations.

Observers collected pollock length and weight data during 1990, 1991, and 1992, however, sample sizes are too small to support comparisons of April and June fish, particularly within the same year.

Impacts to the Biological Environment

As the fishing pattern of the fleet changes, they are expected to have different impacts on the environment and ecological components. The significant considerations would be (1) impacts on the pollock resource itself, (2) impacts on marine mammal populations, (3) impacts on bycatch of prohibited species.

Impacts on the Pollock Resource

Pollock harvests for the W/C GOA are constrained by the overall pollock TAC, which is set within the resource's biological potential (ABC). The harvest in each statistical area and season is constrained by apportionments of the TAC. Thus shifting the pollock second season would not affect whether the resource gets overharvested or not.

However, if the second season is delayed, the fishery would encounter fewer younger fish and not have to discard as many young or undersized pollock. In 1991, processor reports indicate that the percent of pollock catch discarded in the pollock target fishery was approximately one percent in January, nine percent in February, five percent in June, and less than one percent in July. This was more pronounced in 1992, when a strong 1988 year class of pollock was recruiting to the commercial fishery. A high proportion of pollock caught in April was less than 30 centimeters (cm) in length, and was discarded as too small for commercial use. The percent of pollock catch discarded in pollock target fisheries decreased throughout the spring: January (26 percent), February (12 percent), March (one percent), June (5 percent), and July (3 percent). This suggests that delay of the second season will result in the capture and discard of fewer small fish.

In addition, by delaying the second season, the pollock would have more time to feed and fatten up during the spring. When the fish are taken later in the season, the condition factor of the product would be better, the product recovery rate (PRR) would be higher, and fewer individual pollock would be harvested to fill the same total allowable catch, which is set by weight rather than numbers. To the extent that a season delay would also tend to reduce the number of roe-bearing pollock harvested at the end of the spawning season. This proposed rule is consistent with the objective of Amendment 19 which established seasonal fisheries in part to protect the reproductive potential of pollock. Thus, delaying the second season could be slightly better for the pollock resource.

Impacts on Marine Mammals

Changing the second pollock season would have the following potential impacts on marine mammals:

- (a) A later opening may result in less capture and discard of small pollock in the W/C GOA. Anecdotal reports indicate that in the first quarter and in April 1992 the catch of small pollock under 30 cm was very high, especially in area 62. Small pollock are preferred by juvenile sea lions over larger pollock; capture and discard of small pollock could reduce their availability to marine mammals.
- A later opening may be beneficial to the sea lion (b) population in that it will minimize fishing efforts during the last months prior to birth of pups (April-May). The pollock fishery would then be conducted during a time when alternative food sources such as salmon are more available to sea lions, lessening the competition for pollock. Also, tagging data indicate that females with pups make relatively short foraging trips while on breeding grounds. Ten nautical mile clsoed zones are expected to be most effective during the breeding season. Although this season delay would increase pollock effort during the breeding season (June-July), overall groundfish fishing effort within the second season would likely not change as fishermen shift to other groundfish target fisheries.

A primary objective of the Council's pollock-sea lion interactions management strategy has been to spatially and temporally disperse trawl fishing effort to increase sea lion foraging success. Under this proposed delay from April to June, the length of the fisheries and areas of harvest are not expected to change significantly. The effect of this action is then to displace a fishery lasting several days to two weeks from early April to early June. The lapse in fishing in April and May could provide some benefit to sea lions: fishing activity would be further removed from winter when sea lions have increased nutritional needs and environmental stresses, to a time when other prey resources are more available. The second quarter fishery would be followed closely by the third quarter fishery, starting in 1993 on June 28. In consideration of the short fishing season, small seasonal harvest, and the great mobility of pollock, it appears unlikely that the proposed change would affect local pollock abundance or sea lion foraging success.

Based on a review of available data and existing management measures to protect Steller sea lions, the proposed second quarter pollock season delay is not expected to adversely affect Steller sea lions.

Impacts on Bycatch of Prohibited Species

In the GOA, the Pacific halibut bycatch limits for hook-and-line and trawl fisheries for groundfish are established each year, based on Council recommendations. Pacific salmon, crabs, and herring may not be retained in groundfish fisheries, however, there are currently no bycatch limits established for those species in the GOA. There is no evidence to suggest that the timing of this bycatch within the second season has any positive or negative impact on the prohibited species themselves.

The trawl halibut bycatch limit is divided into quarterly seasonal allowances. If attained, these allowances result in seasonal closures of all trawling for groundfish with the exception of pelagic trawling for pollock, which has an exceptionally low bycatch rate of halibut. Delay of the second pollock fishing season will therefore not affect the overall amount of halibut caught incidentally in groundfish fisheries, but may increase the amount of halibut available to support second quarter fisheries other than pollock. Those fisheries, primarily for flatfish and possibly Pacific cod, experience relatively high halibut bycatch at the beginning of the second quarter. Depending on the species targetted in lieu of pollock, the fleet may achieve a higher total groundfish harvest through availability of halibut no longer needed for the pollock fishery. In consideration of halibut bycatch rates in second quarter fisheries, NMFS anticipates a closure to all trawling except pelagic trawling for pollock during the second quarter, as occurred in May of 1991 and 1992.

There are limited data available to compare what the bycatch of salmon, crab, and herring would be with April and June pollock starting dates. This is because the most recent April pollock fishery occurred in 1990, the first year of the domestic observer program. At that time, coverage of vessels was low and reliability of data was highly variable. Since the second pollock season is short, delaying those fisheries would only displace trawling for other species by several days to two weeks, and is unlikely to have any significant effect either on bycatch rates or on overall accrual of catch of these prohibited species. The pollock fishery, however, would be displaced approximately two months, and would be conducted solely with pelagic trawl Observer data indicate that the bycatch rate for chinook salmon in the pelagic trawl pollock fishery decreases substantially from the first quarter to June (Table 1). contrast, accrual of other salmon and herring are less predictable but may be higher.

Table 1. Bycatch Rates of Chinook and Other Salmon, and Herring in the W/C GOA Pelagic Trawl Pollock Fishery in 1991 and 1992. Data are from the NMFS

Observer Program. Salmon are in number of fish per metric ton (mt) of groundfish; herring are in kilograms (kg) of herring per mt of groundfish.

	CHIN	OOK	OTHER	SALMON	HERR	ING
	1991	1992	1991	1992	1991	1992
January	0.230	0.156	0.001	0.000	0.000	0.000
February	0.103	0.130	0.001	0.001	0.059	0.007
June	0.021	0.017	0.082	0.022	0.000	0.401
July	0.016	0.031	0.330	0.389	0.028	1.794

Red king crabs were not reported to be taken in the pelagic trawl pollock fishery. Bycatch rates for Bairdi tanner crabs were always low, between 0 and 0.001 (crabs/mt groundfish) in the first quarter, June, and July in 1992; in 1991 the rate increased from 0 (first quarter) to 0.005 (June), and 0.009 (July).

REGULATORY IMPACT REVIEW - AN ECONOMIC ANALYSIS OF THE ALTERNATIVES

Introduction

This chapter examines the alternatives and presents the economic conclusions for a regulatory amendment to the GOA FMP to delay the second pollock season in the W/C GOA. It constitutes the Regulatory Impact Review/Initial Regulatory Flexibility Analysis (RIR/IRFA) part of the EA/RIR/IRFA for this proposed action.

The Magnuson Fishery Conservation and Management Act (MFCMA) requires that fishery resources be managed so as to provide the greatest overall benefit to the nation. National Standards 5 and 7 (MFCMA, Section 301a) provide cost minimization or economic efficiency standards. Finally, Executive Order 12291 requires that rules be developed with a cost/benefit approach, at least cost to society, and where potential benefits outweigh potential costs.

Since NMFS does not independently collect monthly product recovery or value information, NMFS contacted four key pollock industry representatives and requested information related to the proposed season delay. Information provided by the groundfish processing sector was used to assess how pollock yield, product mix, and quality might differ under Alternatives 1 and 2. NMFS also asked processors about participation of pollock harvesters in other groundfish fisheries during April. Since pollock is allocated to the inshore component in the GOA, NMFS contacted shoreside operators in Kodiak, on the Alaska Peninsula, and Dutch

Harbor who participated in second quarter GOA pollock fisheries in 1992. Information on the first wholesale value of pollock products was derived from a State of Alaska processor survey for the 1991 fishing year; only second quarter pollock prices were used. Fillet values were average 1991 prices for skinless and boneless fillets, weighted by the amount of each "packaging" type, such as frozen in blocks, shatterpack, etc. Fillets with ribs and skin comprised only one percent of fillets reported in the survey. The "reasonableness" of PRR provided by processors was confirmed by NMFS staff who have conducted research on processing and were familiar with the GOA pollock fishery.

The proposed delay in the second season for pollock is motivated by a desire to increase the value of the pollock harvest via gains in product recovery and higher value products, to allow a potential decrease in pollock discards, and to provide an anticipated decrease in chinook salmon bycatch. The Council adopted a particular framework date for the delay as part of the amendment proposal considered at its September, 1992 meeting. In response to comments, the Secretary may choose a seasonal opening date intermediate to Alternatives 1 and 2. Should that be the case, the quantifiable cost and benefits and economic impacts described below would be bracketed by the appropriate assessments under each alternative.

Economic Effects of the Alternatives

Geographic Participation

The following outlines which geographic areas are most likely to benefit from participation of processors in the second seasonal pollock fishery in the W/C GOA. These scenarios are based on information provided by the domestic observer program, by processors, and on analyses of domestic fisheries data from the last several years.

Under Alternative 2 and current regulations, then:

- (a) the same individuals would likely participate in harvesting and processing of GOA pollock as in 1992, including some processors in close proximity to the BSAI who also participate in BSAI pollock fisheries. This is similar to the pattern experienced in 1991 and 1992.
- (b) GOA pollock harvesters that also participate in June salmon fisheries may not be able to participate fully in the pollock season, depending on the salmon openings.
- (c) given excess harvesting capacity, harvesters already fishing pollock in the GOA are expected to completely

replace those electing to fish salmon or other species, or in the BSAI. The duration of pollock fisheries is anticipated to be similar to that in 1992; i.e., several days to two weeks within the second quarter, however, increased participation could be possible for processors not electing other fisheries.

- (d) apportionment of W/C GOA pollock into fisheries in three statistical areas insures that the harvest will remain spatially distributed. The proportion of catch in each area taken near principal ports of Kodiak, Sand Point, and Akutan/Dutch Harbor will depend on distribution of pollock and participation by harvesters based in each port, but harvests could occur closer to ports if a higher percentage suitably-sized pollock were encountered than earlier in the year.
- (e) when and where the bottom trawl pollock fishery can operate will depend on the status of the halibut PSC seasonal trawl allowance. It is anticipated that as in 1991 and 1992, halibut will be limiting and the pollock fishery will be conducted with pelagic trawls. Since harvesters have already invested in pelagic nets, additional costs to harvesters for purchase of pelagic gear would be minimal.
- (f) if the pollock fishery is conducted entirely with pelagic trawls, savings in halibut bycatch may result in a slightly higher overall groundfish harvest during the second quarter.

The Council is considering proposed FMP and regulatory amendments that would (1) delay the second "B" season for pollock in the BSAI from June 1 to a later date, and (2) require exclusive registration for either the GOA or BSAI for (pollock trawl) harvesting vessels. If the Council votes at its December, 1992 meeting to forward the proposals to the Secretary, and if the Secretary, after review and comment, approves those actions, then those measures could be implemented in the latter part of the 1993 fishing year.

The proposed BSAI "B" season delay and exclusive registration can be expected to determine which harvesters and processors would participate in GOA pollock fisheries. Within each of the three W/C GOA area pollock fisheries, harvest patterns may be skewed towards "GOA ports" of Kodiak and located on the Alaska Peninsula, and "BSAI ports" of Akutan/Dutch Harbor. Regardless of the disposition of the two proposals, competition within the GOA could continue.

Product Mix and Ouality

The proportion of fillets and surimi, and grades of surimi produced, are dependent on factors such as current market price and availability of processing labor, which are not readily predictable. No processor reported a predictable improvement in quality of fillets in June from April, but two of the four respondents said that delaying the second season could result in a greater proportion of larger fillets or higher grades of surimi. One processor indicated a change in product mix from fillets to surimi in June because of labor conflicts resulting from simultaneous processing of pollock and salmon within the plant. A NMFS scientist reported that biochemical changes occurring in muscle fibers related to spawning could cause changes that might affect the quality of some products. effects include a change in the gel strength of surimi and the potential for formed minced portions to sustain a breaded In general, processors responded that they would be more likely to change the proportion of product forms between April and June in response to market value, related to factors such as the level of cold storage holdings.

Because of uncertainty about these issues, data were calculated for production of all fillets and all surimi, the most common products produced from W/C GOA pollock in the second quarter. These data are inclusive of effects of production of other proportions of these products.

Product Recovery

PRR were reported to improve from 17 to 20 percent for fillets, and from 15 to 19 percent for surimi of a similar grade.

If the second pollock season is delayed (until May 31 in 1993), then:

- (a) processors report that based on April, 1990 and June, 1991 and 1992 production, flesh recovery of pollock will increase from April to June; the increase is 18 percent for fillets and 27 percent for surimi (Table 2).
- (b) there is no predictable change in quality or marketability of fillets or surimi produced in April versus June.
- (c) a season delay may result in a greater percentage of larger fillets and higher grade surimi.

Product Value

For product value, processors were not willing to estimate how

wholesale prices might change under a delayed second season, especially in the extremely volatile surimi market. Production of higher grades of surimi or larger fillets have potential to increase the value of production. The qualitative assessment of market impacts by industry contacts indicates increased product value from decreased fishing, processing, and storage costs.

Assuming product mix, quality, and wholesale price to be equal in April and June, any increase in value depends primarily on the amount of product produced at each time. The 1993 harvest specification for pollock in the W/C GOA recommended by the Council is 111,000 mt. The allocation for the second quarter is 27,750 mt. Based on amounts of pollock likely to be available in 1993 and on 1991 first wholesale prices, gross revenue to processors would increase between 18 and 27 percent as shown in table 2.

Table 2. Amounts and Value of Pollock Products Produced from Second Quarter Fisheries in the Western and Central Gulf of Alaska (W/C GOA). The second quarter pollock allocation is 27,500 mt. Data are based on the 1991 first wholesale value of fillets (\$1.38 per pound), and of surimi (\$1.47 per pound). Amounts are in mt product, value in millions of dollars.

	ALL FILLETS		ALL SURIMI	
	amount	value	amount	value
Alternative 1 (April)	4,718	14.3	4,162	13.5
Alternative 2	5,550	16.9	5,272	17.1
(June)				
Increase				
(Alt. 2):	832	2.6	1,110	3.6
<pre>% Increase</pre>				
(Alt. 2):	18%	18%	27%	27%

The increase in gross wholesale revenues presented in Table 2 approximately reflects changes in profit, since the cost of operation for processors under a delayed second season is not expected to increase and may in fact decrease to the extent that average fish size increases (less fish per mt round weight) and fish aggregate (schooling effect). Any change in exvessel value could not be substantiated, but harvesters could realize lower costs, for example, through shorter trips and fewer encounters with small pollock not acceptable for processing.

Harvesting and Processing Logistics

If the second pollock season is delayed, the fishery would encounter fewer younger fish and not have to discard as many young or undersized pollock. This would increase harvesting and processing efficiency, although the extent of the improvement depends on the proportion of small fish and is not readily quantifiable. Harvesting activities would be improved, by decreasing time spent searching for and discarding unsuitable fish at sea, and by maximizing the value of each landing of fish. Processing would be more efficient, through decreased sorting, storage, discarding, and transhipment to meal reduction facilities, and by insuring a steady supply of fish of suitable size for processing machinery. If pollock are larger, fewer individual pollock need be processed, potentially reducing labor costs, and wear and tear on machinery.

Some processors indicated an unquantifiable logistic benefit from a season delay in that the June pollock fishery would then occur just prior to the third season pollock fishery, reducing the expense and time to "changeover" between groundfish and nongroundfish species. These processors indicated that because of the short duration of the pollock and halibut fisheries, they are able to schedule deliveries and processing schedules to accommodate pollock, halibut, and salmon as necessary, and that existing processing labor was adequate for multiple species. processor however, said that those participating in simultaneous pollock, salmon, and halibut fisheries in June, might be precluded from devoting sufficient labor to pollock to produce fillets. In a year when prices for surimi were depressed, this would result in a loss of first wholesale value from pollock. This could be exacerbated for processors who did not have ready access to processing labor, or those at remote locations where the cost of importing labor was high.

Bycatch of Prohibited Species

Monetary impacts due to prohibited species bycatch are anticipated to be minimal. Pacific halibut is the only prohibited species that affects groundfish fishing in the GOA. Since non-pollock fisheries will shift by less than two weeks under Alternative 2, changes in bycatch rates and bycatch accrual are not expected to be significant in those fisheries. Bycatch of Pacific halibut will be self-limiting because required fishing closures will close fishing for all but pelagic trawl pollock fisheries when seasonal halibut allowances are met. Savings of halibut bycatch in the pollock fishery may result in higher catch of other groundfish species. Under either alternative, halibut is expected to become limiting relatively early within the second quarter.

Bycatch of chinook salmon is expected to decrease with Alternative 2, while bycatch of other salmon and herring might increase. The difference in number of fish and crabs and

potential value to sport and commercial fisheries is not known.

SUMMARY OF BIOLOGICAL AND ECONOMIC DIFFERENCES BETWEEN THE ALTERNATIVES

Biological Implications

Delaying the second pollock season to a date near June 1:

- (a) does not alter protection provided for groundfish stocks by the FMP.
- (a) could be slightly better for the pollock resource.
 Young and undersized pollock, and any residual roebearing females would be left to grow. Pollock would
 be harvested when in better condition; fewer individual
 pollock would be harvested to fill the same seasonal
 allowance.
- (b) is not expected to have an adverse impact on Steller sea lions, other marine mammals, or sea birds. Regulatory measures are currently in place which minimize adverse impacts of groundfish fisheries on Steller sea lions, and the management measure considered will not significantly change fishing effort distribution, harvest levels, or season length.
- (c) could be beneficial for marine mammals. Decreased capture and discard of small pollock could increase their availability to marine mammals. A later opening will also minimize fishing efforts near rookeries during the last months prior to birth of pups (April-May). The pollock fishery would be conducted at a time when alternative food sources, such as salmon, are more readily available.
- (d) is anticipated to reduce bycatch of chinook salmon in the pollock fishery. Bycatch of other salmon and herring might increase, and halibut and crab bycatch will be unaffected. Any resulting changes in bycatch are not expected to be of magnitude to affect stocks or condition of halibut, crab, herring, and salmon resources or fisheries.

Economic Implications

Delaying the second pollock season to a date near June 1:

(a) would allow harvesters and processors to benefit from shorter trips, fewer discards, better timing of the harvest, yield improvements, timing of supply, and potentially from production of higher grades of surimi or sizes of fillets. Depending on product mix and market value, the increase in first wholesale value is anticipated to be between \$ 2.6 million and \$ 3.6 million.

- (b) would likely have the same participants as in 1991 and 1992, although a small number of harvesters that fish both for pollock and salmon may not be able to fully participate in June pollock fisheries. Some processors might need to shift to pollock products that require less labor, or to acquire additional labor.
- (c) will not result in a significant redistribution of costs and benefits among geographic regions, harvesters, or processors, except as in (b).
- (d) will increase the likelihood of a pollock harvest limited to vessels using pelagic trawl gear, as in 1991 and 1992. Additional costs to harvesters for purchase of pelagic gear under this alternative would not be significant because 1991 and 1992 fisheries were conducted in June, and with only pelagic trawl gear.
- (e) if the pollock fishery is conducted with pelagic gear, savings in halibut bycatch may increase the total catch of groundfish species during the second quarter.

Additional to this proposal, adoption of both a delayed "B" pollock season in the BSAI and exclusive registration might affect which harvesters and processors will participate in GOA pollock fisheries. Within each of the three W/C GOA area pollock fisheries, harvest patterns may be skewed towards "GOA ports" of Kodiak and located on the Alaska Peninsula, and "BSAI ports" of Akutan/Dutch Harbor. Regardless of the disposition of the two other proposals, competition within the GOA will continue.

Management and Enforcement Costs

Neither alternative will result in changes to reporting practices. Neither will result in increased management or enforcement costs to NMFS or any other management agency staff beyond that which is already required for the inseason monitoring and enforcement of catch and PSC limits.

EFFECTS ON ENDANGERED AND THREATENED SPECIES AND ON THE ALASKA COASTAL ZONE

Neither alternative is expected to have any adverse effect on endangered or threatened species, or their habitat. Thus, formal consultation under Section 7 of the Endangered Species Act is not

required.

Each of the alternatives discussed above would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Zone Management Program within the meaning of Section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

OTHER EXECUTIVE ORDER 12291 REQUIREMENTS

Executive Order 12291 requires that the following three issues be considered:

- (a) will the proposed rule have an annual effect on the economy of \$ 100 million or more?
- (b) will the proposed rule lead to an increase in the costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions?
- (c) will the proposed rule have significant adverse effects on competition, employment, investment, productivity, or on the ability of U.S. based enterprises to compete with foreign enterprises in domestic or export markets?

Regulations impose costs and cause redistribution of costs and benefits. If the proposed regulations are implemented as anticipated, these costs are not expected to be significant relative to total operational costs. This regulatory amendment is not expected to have an annual effect of \$ 100 million.

Alternative 2 should not lead to a substantial increase in the price paid by consumers, local governments, or geographic regions since higher prices would be associated with higher value products and not with the same products, and because no significant quantity changes are expected in groundfish markets. Costs of management and enforcement of delayed pollock fisheries are not anticipated to increase.

The proposed delay would not have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S. based enterprises to compete with foreign enterprises in domestic or export markets.

IMPACT OF THE AMENDMENT RELATIVE TO THE REGULATORY FLEXIBILITY ACT

The Regulatory Flexibility Act (RFA) requires that impacts of regulatory measures imposed on small entities (i.e., small

businesses, small organizations, and small governmental jurisdictions with limited resources) be examined to determine whether a substantial number of such small entities will be significantly impacted by these measures. Fishing vessels are considered to be small businesses. Over 300 trawl vessels may fish for groundfish off Alaska in 1993, based on Federal groundfish permits issued by NMFS. While this number of vessels is considered substantial, this regulatory measure will only affect a portion of the fleet.

FINDING OF NO SIGNIFICANT IMPACT

For the reasons discussed above, neither implementation of the status quo or Alternative 2 would significantly affect the quality of the human environment, and the preparation of an environmental impact statement on the final action is not required under Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

9.0 LIST OF PREPARERS

Jessica A. Gharrett, Fisheries Biologist (Management) NMFS, Alaska Region Juneau, Alaska